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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,602	12/27/2001	Tsuyoshi Nakamura	06753.0489	9088

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EXAMINER

ROJAS, BERNARD

ART UNIT PAPER NUMBER

2832

DATE MAILED: 04/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/026,602

Applicant(s)

NAKAMURA ET AL.

Examiner

Bernard Rojas

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-5 and 13-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-5, 13, 14, 19 and 20 is/are rejected.
- 7) ☒ Claim(s) 15-18 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 02/13/2006 have been fully considered but they are not persuasive. Applicant states, "Specifically, Fig. 4 of Minoura only schematically or topologically discloses the relationship between busbar 15, junction box 12, and fuselinks 20, and not the physical structure of the relay unit. Accordingly, Minoura cannot disclose physical structures, or any relationships between them, such as switch connecting bus bars and coil connecting bus bars as set forth in as-amended independent claims 2. Moreover, a comparison of Fig. 3 of Minoura and Fig. 10 of the specification, for example, discloses different physical structures."

Minoura discloses a relay unit wherein said downstream fuse connector portion and said relay terminal protrude in directions opposed to one another [figure 4]. Any method of implementing the relay unit of figure 4, such as using a wire lead or a metal trace to connect the components, functions as a connecting bus bar. Therefore Applicant has not claimed any specific structure that differentiates the claimed invention from device disclosed by Minoura.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2-5, 13, 14 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Minoura [US 5,038,050].

Claim 2, Minoura discloses a relay unit [figure 4] with a plurality of relays [figure 4, the squares with the coil and switch inside], a plurality of fuses [20]; and a power supply bus bar [15] configured to supply current to said plurality of relays; wherein each of said relays includes a pair of switch connecting bus bars [relay sockets, figure 3] between which a relay switch element is intervened and a pair of coil connecting bus bars between which a relay coil element is intervened, wherein one of the switch connecting bus bars is formed with a downstream fuse connector portion to which each of the fuses is electrically coupled and a relay terminal configured to be electrically coupled to a connector [figures 3 and 4] and

wherein said downstream fuse connector portion and said relay terminal protrude in directions opposed to one another [figure 4].

Claim 3, Minoura discloses that the other one of the switch connecting bus bars and the pair of coil circuit are formed with relay terminals to be electrically connected to relevant connectors, respectively [16, figure 4].

Claim 4, Minoura discloses that the power supply bus bar is located at an inner surface of a unit case [figure 4, col. 3 lines 21-23].

Claim 5, Minoura discloses that the power supply bus bar is formed with an upstream fuse connector portion [fuse sockets 24, figure 31]; and the downstream fuse connector portion formed on said one of the switch connecting bus bars and the

upstream fuse connector portion formed on the power supply bus bar are located in an opposed relationship to form a pair of fuse connector components [figure 4].

Claim 13, Minoura discloses that the plurality of relays are connected to the respective fuses by vias on a printed circuit board [col. 2 lines 64-66].

Claim 14, Minoura discloses that each of said plurality of relays is configured to be physically connected to one of the respective fuses [using the fuse and relay sockets shown in figure 2].

Claim 19, Minoura discloses that the relay terminal is configured to supply power to its respective relay [figures 3 and 4, the terminals provides power to the relay coil as shown in figure 4].

Allowable Subject Matter

Claims 15-18 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard Rojas whose telephone number is (571) 272-1998. The examiner can normally be reached on M-F 8-4:00), every other Friday off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bernard R. ...
Br

Elvin Enad
ELVIN ENAD
SUPERVISORY PATENT EXAMINER
4/3/06